CLAUSE H-45 – SUBCONTRACTOR SUBMITTALS (August 2002)

- (a) <u>General</u>. The Subcontractor shall submit all shop drawings, data and samples in accordance with Subcontract Clause I-122 entitled "Specifications and Drawings for Construction", the Technical Provisions and the detailed requirements of this section.
- (b) <u>SURA Rights</u>. SURA shall have unrestricted rights in all shop drawings, as-built drawings and other data submitted pursuant to this subcontract.

/ Submittal requirements are as detailed in the Specifications and Drawings

/ In furtherance of Subcontract Clause 110, the Subcontractor shall furnish the SOTR construction and manufacturer's material generated and acquired in the performance of the work under this subcontract as described herein.

(c) Submittal Register.

- (1) Within fifteen (15) calendar days after receipt of Notice-to-Proceed, the Subcontractor shall submit to the SOTR four (4) copies of the Shop Drawings and Material Submittal Register (SDMSR), listing all data submittals required by the subcontract for information or review action by SOTR.
- (2) The Register shall indicate the type of item (submittal), subcontract or specification requirement reference, the Subcontractor's scheduled dates for submitting the above items and projected need dates. Items listed on the Register shall be such that all shop drawings or data required under each item will normally be submitted under one transmittal. The Subcontractor shall avoid listing single broad entries that require multiple transmittals of drawings or data.
- (3) The Register shall reflect a reasonable time for each review action by SURA taking into consideration the complexity and the number of shop drawings submitted at one time or during one period of time, mail time, and place of review. Normally reviews by SURA will be completed and returned to the Subcontractor within two to three weeks.
- (4) The Subcontractor shall update its initial register the second Tuesday of each month. The Subcontractor will submit (4) prints of the updated register to the SOTR. These updated registers are to contain all previously identified items, all transmittal numbers with their respective returned transmittal action codes, the Subcontractor's date of receipt and any revised Subcontractor submittal dates in accordance with the latest approved progress schedule.

(d) Transmittal Forms.

- (1) The Subcontractor shall complete and submit the form, Transmittal of Shop Drawings, Equipment Data, Material Samples or Manufacturer's Certificates of Compliance, with each shop drawing submittal. Transmittal forms shall be numbered consecutively according to the numbering system set forth in the SDMSR instructions.
- (2) The Subcontractor shall certify on each transmittal form that it has reviewed each submittal in detail that each is correct and in strict conformance with the subcontract drawings and specifications except as otherwise explicitly stated.
- (3) Any variation from the subcontract requirements will be highlighted on the shop drawing submittals and must be accompanied by a separate formal written request for deviation.
- (e) <u>Shop Drawings and Data</u>. Specific submittals required by this subcontract are shown in each submittal section of the Technical Specifications.
 - (1) Shop drawings and other submittals shall be complete and shall be submitted in logical order to facilitate proper coordination and review. Incomplete or improperly prepared submittals may be returned to the Subcontractor without review action by the SOTR. Subcontract drawings shall not be submitted as shop drawings. Prints shall be sharp in detail and suitable for making quality reproductions. Copies of catalog cuts, brochures, data and similar information shall be the manufacturer's standard issue; only high quality reproductions will be acceptable. The Subcontractor shall mark all copies of separate sheets or bound volumes with appropriate information.
 - (2) (i) Seven (7) copies of the shop drawings and seven (7) copies of preprinted material are required.
 - (ii) The approval of the drawings by the SOTR shall not be construed as a complete check, but will indicate only that the general method of construction and detailing is satisfactory. The Subcontractor shall be responsible for the dimensions and design of adequate connections, details, and satisfactory construction of all work. If the Subcontractor considers any correction indicated on the drawings to constitute a change to

the subcontract, notice, as required under Subcontract Clause 110 shall be given to the Subcontracting Officer.

- (3) The SOTR will return three (3) copies of review shop drawings and other data stamped with the appropriate approval code and/or indicated on the transmittal form.
- (4) When the submittals listed below are called for in the Technical Specifications, seven (7) copies are required and the following requirements pertaining to form of submittal will apply:
 - (i) Definitive drawings must be fully dimensioned and detailed for each item.
 - (ii) Schematic piping and/or wiring diagrams must be fully dimensioned and detailed.
 - (iii) Installation instructions will be manufacturer's or Subcontractor's manual or published instructions.
 - (iv) Operating manual and/or instructions are to address, as a minimum, the following as applicable to the equipment:
 - (A) Design operating conditions
 - (B) Limiting operating parameters
 - (C) Routine test requirements
 - (D) Trouble shooting procedures
 - (E) Normal operating procedures, including start-up and shutdown
 - (F) Calibration instructions
 - (v) Maintenance manual and/or instructions are to address, as a minimum, the following as applicable to the equipment:
 - (A) Preventative maintenance requirements
 - (B) Disassembly procedures, including any special tool requirements
 - (C) Procedure for inspecting disassembled parts
 - (D) Reassembly and any special tool requirements
 - (E) Detailed parts list
 - (F) Recommended spare parts list
 - (vi) Lubrication manual and/or instructions are to address, as a minimum, the following as applicable to the equipment:
 - (A) Procedure
 - (B) Type of lubrication
 - (C) Frequency of lubrication
 - (vii) Performance curves must be certified and standard
 - (viii) Manufacturer's test report must be certified and standard
 - (ix) Test data sheets must be certified and standard
- (5) Prior to subcontract completion, the Subcontractor shall furnish a complete listing of installed equipment to include the information listed below. This listing shall be inclusive of any special test equipment and spare parts that may be required by the terms of this subcontract and which become the property of SURA on its completion.
 - (i) Equipment name or nomenclature
 - (ii) Actual manufacturer's name
 - (iii) Manufacturer's model number
 - (iv) Serial number, if applicable
 - (v) Normal nameplate data
 - (vi) Acquisition cost or market value
- (f) Samples. Any samples and descriptive data required shall:
 - (1) Be shipped prepared or delivered to the SOTR at least thirty (30) calendar days before scheduled use.
 - (2) Be properly marked to show the subcontract number (for this subcontract), the name of the material, trade name of manufacturer, place of origin, name and locations of the work where the material represented by the sample is to be used, the name of the Subcontractor submitting the sample and any additional information as may be described in the Technical Specifications.

Samples not subjected to destructive tests may be retained until completion of the work but thereafter will be returned to the Subcontractor if the Subcontractor requests return in writing. Return will be at Subcontractor's expense. Failure of any sample to pass the specified requirements for a particular use will be sufficient cause for deducting from the subcontract price the actual SURA cost incurred for any re-review or re-testing.

(g) Certificates of Compliance. Any certificate required for demonstrating proof of compliance of materials with specification requirements shall be executed in two (2) copies and submitted to the SOTR. Each certificate shall be signed by an authorized officer of the manufacturing company and shall contain the name of the Subcontractor and location of the project and the quantity and date or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates shall be signed by an authorized official of the laboratory and contain the name and address of the testing laboratory and the date or dates of the tests to which the reports apply. Certification shall not be construed as relieving the Subcontractor from furnishing satisfactory material if after tests are performed on selected samples, the material is found not to meet the specified requirements.